PDR RID Report

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FOS Design Specification

RID ID **PDR** 99 Review FOS MMC-TRS6 Originator Ref Priority 2

Section Page 4-43 Figure Table

Category Name M&O HAIS Actionee

Sub Category

FOS Hub redundancy Subject

Description of Problem or Suggestion:

It appears that if the operational hub connecting the EOC workstations to the Real-Time Phase fails the FOS must reconfigure user workstations to a backup hub by physically making hardware configuration changes. This delay could extend beyond the end of the current real-time contact without the FOT regaining a command link with the spacecraft.

Originator's Recommendation

Consider the use of autonomous failover of the FOT on-line workstations, at a minimum, to ensure that real-time operations can continue with minimal interruption.

GSFC Response by: **GSFC** Response Date

HAIS Response by: D. Herring **HAIS Schedule** 1/20/95

M. Armstrong 1/20/95 HAIS R. E. **HAIS Response Date**

The fail-over procedure for an unavailable User Station (for whatever reason) is for the user to move to a new User Station and continue operations. There is no need to perform any hardware configuration, either on the User Station itself or on the hub.

The hubs deployed at the EOC will be high-end, fault-tolerant hubs with no single point of failure. Thus, each individual hub will meet the no single point of failure requirement, insuring that no single problem will bring down an entire hub. (These class of hubs have dual-power supplies, and they distribute their command and management functions across their internal LRUs.) Additional fault-tolerance can be achieved by insuring that when multiple User Stations are attached to a logical string, the User Stations are spread across more than one hub.

Status Date Closed 2/1/95 **Sponsor** Closed Johns

> ***** Attachment if any

Date Printed: 2/8/95 Page: Official RID Report